//////ALPINE®

TDM-7546E

FM/AM Cassette Receiver

- OWNER'S MANUAL
  Please read this manual to maximize your enjoyment of the outstanding performance and feature capabilities of the equipment, then retain the manual for future reference.

-
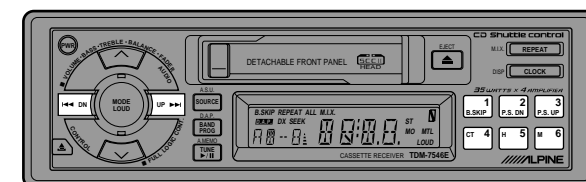
35W × 4

Pecaution

⚠ Warning

This label is intended to alert the user to the presence of important operating instructions.
Failure to heed the instructions will result severe injury or death.

DO NOT DISASSEMBLE OR ALTER
Attempts to disassemble or alter may lead to an accident, fire and/or electric shock.

KEEP SMALL ARTICLES OUT OF THE REACH OF CHILDREN
Store small articles (screws etc.) in places not accessible to children. If swallowed, consult a physician immediately.

USE THE CORRECT AMPERE RATING WHEN REPLACING FUSES
Replace fuses only with fuses of the same ampere rating. Failure to do so may result in a fire and/or damage to the vehicle.

HALT USE IMMEDIATELY IF A PROBLEM APPEARS
When problems appear, stop using the system immediately and contact the dealer from whom you purchased the equipment. Some problems which may warrant immediate attention include a lack of sound, noxious odors or smoke being emitted from the unit, or foreign objects dropped inside the unit.

DO NOT OPERATE THE EQUIPMENT WHILE DRIVING
Do not change settings while driving. If operation requiring a prolonged view of the display is required, stop the vehicle in a safe location before attempting operation.

⚠ Caution

This label is intended to alert the user to the presence of important operating instructions.
Failure to heed the instructions can result in injury or material damage.

DO NOT RAISE THE VOLUME EXCESSIVELY
Keep the volume at a level where you can still hear outside noises while driving. Driving while unable to hear outside sounds could cause an accident.

DO NOT USE THIS EQUIPMENT OUTSIDE THE VEHICLE
Do not use this equipment for purposes other than those listed for a vehicle. Failure to do so may result in an electric shock or an injury.

KEEP FOREIGN OBJECTS OUT OF THE CASSETTE COMPARTMENT SLOT
Keep any foreign objects, including fingers, out of the cassette compartment slot.

STOP THE VEHICLE BEFORE CARRYING OUT ANY OPERATION THAT COULD INTERFERE WITH YOUR DRIVING
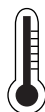If loading or unloading a cassette interferes with your driving, stop the vehicle in a safe location before attempting operation.
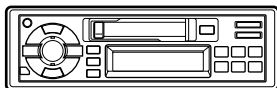
Contents

Precautions

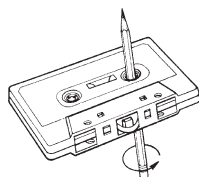## Temperature

Be sure the temperature inside the vehicle is between +60˚C (+140˚F) and –10˚C (+14˚F) before turning your unit on.

Tape Slack

Check and make sure any slack in the tape is taken up before inserting the tape into the unit. A loose tape can get caught in the mechanism and cause damage to the unit and the tape itself. Tighten the tape by inserting a pencil or a similar instrument into the spindle hole and turn until all the slack has been taken up.

Excessively Thin Tape

C-120 type cassette tapes are not recommended for use in automobile tape players.

Precision Tape Mechanism

Prevent any foreign objects from entering the cassette opening as the precision mechanism and tape head may be damaged.
Never play dirty or dusty tapes – they can damage the tape head.

Tape Head Cleaning

Periodic cleaning (approximately every 20 hours of use) of the tape head with a wet type head-cleaning cassette tape (available at audio stores) is necessary for best performance.

Precautions
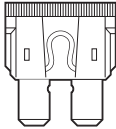
Fuse Replacement

When replacing the fuse(s), the replacement must be of the same amperage as shown on the fuse holder. If the fuse(s) blows more than once, carefully check all electrical connections for shorted circuitry. Also have your vehicle's voltage regulator checked.

15A

Maintenance

If you have problems, do not attempt to repair the unit yourself. Return it to your Alpine dealer or the nearest Alpine Service Station for servicing.
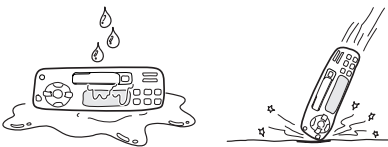
Installation Location

Make sure the TDM-7546E player/receiver will not be exposed to:

- Direct sun and heat
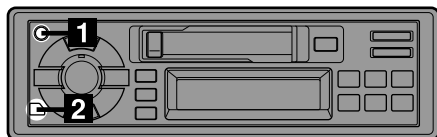- High humidity
- Excessive dust
- Excessive vibrations
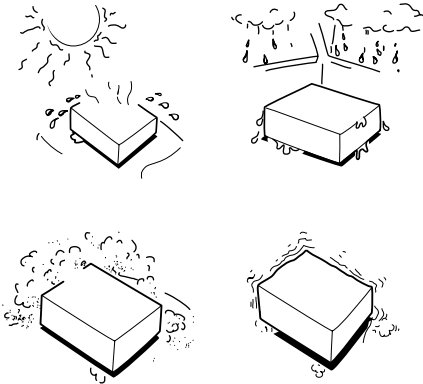
Handling the Detachable Front Panel

- Do not expose to rain or water.
- Do not drop or apply shock.

5

Detaching the Front Panel

1 **PWR**
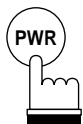
Press the PWR button to turn off the power.

2
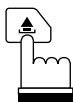
Press the release button until the front panel pops out.

3
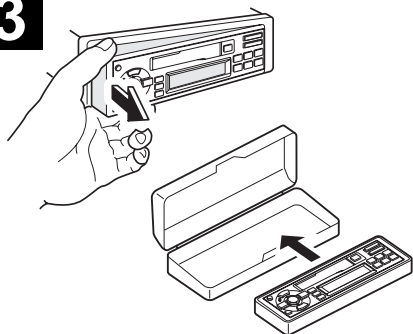
Grasp the left side of the front panel and pull it out.

Note: To protect the front panel, place it in the supplied carrying case.

Attaching the Front Panel

- First insert the right side of the front panel into the main unit by aligning the groove on the front panel with the 2 projections on the main unit.
- Then push the left side of the front panel until it locks firmly in the main unit and a "click" sound is heard.
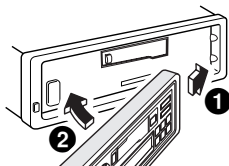
Note: Before attaching the front panel, make sure that there is no dirt or dust on the connector terminals and no foreign objects between the front panel and main unit.

Basic Operation
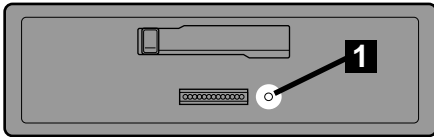
Initial System Start-Up

1 Immediately after installing or applying power to the unit, it should be initialized. To do this, first, remove the detachable front panel. Behind the front panel, to the right of the connector, there is a small hole. Using a ball-point pen or other pointed object, press the reset button mounted behind this hole to complete the initialization procedure.

Automatic Setup (A.S.U.)

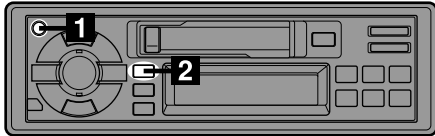This convenient feature sets up the unit automatically after installation.
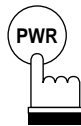
1 Press the PWR (POWER) button to turn on the unit.

PWR

Note: When Power is turned on for the very first time, the A.S.U. (Automatic Setup) function will be initiated automatically. See A.S.U. description below.
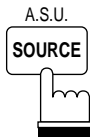
2 Press and hold the A.S.U. (Automatic Setup) button for at least 3 seconds to activate the A.S.U. mode.

A.S.U.

SOURCE

"ASU" blinks in the display.
The unit automatically performs the following operations.
1. Activates Auto Memory mode.
2. Gradually sets the Bass, Treble, Balance and Fader controls to their center positions.
3. Gradually increases the volume to position 12 in the display.
4. Turns the Loudness on.
5. Ends the A.S.U. mode.

7
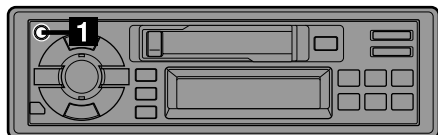
Basic Operation

Turning Power On and Off

1

PWR

Press the PWR button to turn on the unit.

Note: The unit can be turned on by pressing any button except the Eject (⏏) button, or by inserting a cassette tape.

PWR

Press the PWR button again to turn off the unit.

Basic Operation
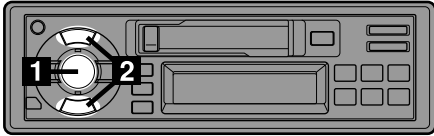
Adjusting Volume/Bass/Treble/ Balance/Fader

1

VOL
↓
BAS
↓
TRE
↓
BAL
↓
FAD

MODE LOUD
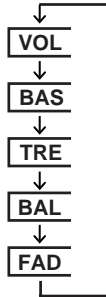
Press the MODE button repeatedly to choose the desired mode.

Note: If the ∨ or ∧ button is not pressed in 5 seconds after selecting the BAS, TRE, BAL and FAD modes, the unit automatically returns to the VOL mode.

2
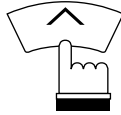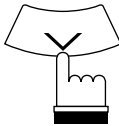
Press the ∨ and ∧ buttons until the desired sound is obtained in each mode.

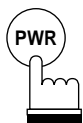**Note:** The Bass and Treble settings for each source (FM, AM, TAPE and CD) are automatically memorized. These settings remain until you manually change them.
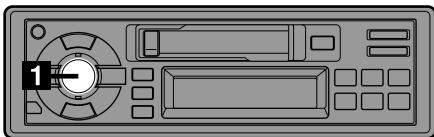
Turning Loudness On/Off

Loudness introduces a special low- and high-frequency emphasis at low listening levels to compensate for the ear's decreased sensitivity to bass and treble sound.

1

MODE LOUD

LOUD

Press and hold the LOUD button for at least **2** seconds to activate or deactivate the loudness mode.
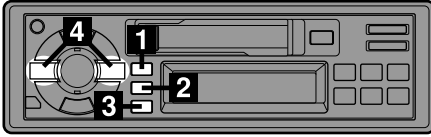
9

$((({}^{(\!(\!\varphi\!)\!)}_\wedge)))$

English

Radio Operation

Manual Tuning

1

SOURCE

```
↓
90.1
↓
TAPE
```

Press the SOURCE button until radio frequency appears in the display.

2

BAND PROG

```
↓
F 1
↓
F 2
↓
AM
```

Press the BAND button repeatedly until the desired radio band is displayed.

3

TUNE ▶/Ⅱ

```
↓
DX SEEK
↓
SEEK
↓
```

Press the TUNE button repeatedly until the SEEK indicator disappears.

Note: Initial mode is DX SEEK.

4

I◄◄ DN   **UP ►►I**

```
F 1      90.1
```

Press the DN or UP button to move downward or upward one step respectively until the desired station frequency is displayed.

Note: To listen to the radio while playing a tape, press the SOURCE button. If you have an Alpine CD Changer connected, press this button twice.

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English
Radio Operation

Automatic Seek Tuning

1
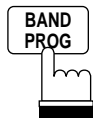
| SOURCE |

↓
| 90.1 |
↓
| TAPE |

Press the SOURCE button until radio frequency appears in the display.

((((ᵗ))))

2

| BAND PROG |

↓
| F 1 |
↓
| F 2 |
↓
| AM |

Press the BAND button repeatedly until the desired radio band is displayed.

3

| TUNE ►/❚❚ |

↓
| DX SEEK |
↓
| SEEK |
↓
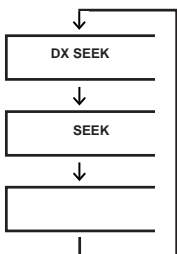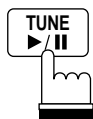
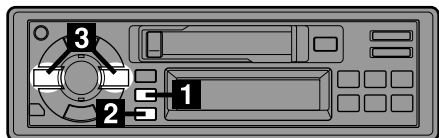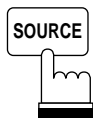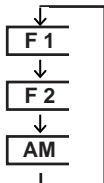Press the TUNE button to illuminate the DX indicator in the display. With the DX mode activated, both strong and weak stations will be tuned in the Auto-Seek operation.
Press again to return to the local mode. The DX indicator will turn off and only strong radio stations will be tuned.

4

| ◄◄ DN | | UP ►►| |

| F 1   90.1 ST |
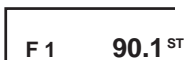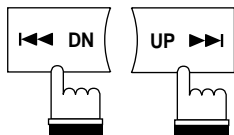
Press and release the DN or UP button to automatically seek a station downward or upward respectively.

Note: The ST indicator appears in the display whenever a Stereo FM station is tuned. As the stereo FM signal weakens, the unit gradually changes mode from stereo to monaural to reduce noise. Should the level drop low enough to completely make the signal monaural, the ST indicator will turn off. When the signal becomes strong enough, the unit automatically switches back to the stereo mode.

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Radio Operation

Manual Storing of Station Presets

1

1 B.SKIP	2 P.S. DN	3 P.S. UP
ст 4	н 5	м 6
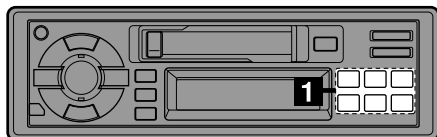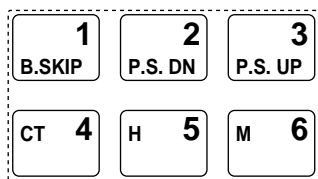
1. Tune in a desired radio station you wish to store in the preset memory.
2. Press and hold any one of the preset buttons (1 through 6) for at least **2** seconds. The station frequency will start blinking.
3. Press the preset button into which you wish to store the station while the display is blinking (within 5 seconds).
   The display stops blinking to indicate that the station has been memorized. The preset number is also displayed.
4. Repeat the procedure to store 5 other stations onto the same band.
   Use this procedure for other bands.

A total of 24 stations can be stored in the preset memory (6 stations for each band FM1, FM2, AM and D.A.P.).

Note: If a preset memory has already been set in the same preset location, it will be cleared and the new station will be memorized.

12

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Radio Operation
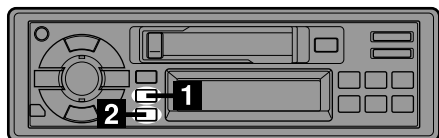
Automatic Memory of Station Presets
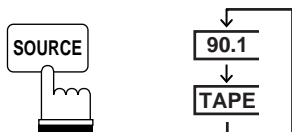
1

SOURCE

↓
90.1
↓
TAPE

Press the SOURCE button until radio frequency appears in the display.

2

BAND PROG

↓
F 1
↓
F 2
↓
AM

Press the BAND button repeatedly until the desired radio band is displayed.

((ᴵ))

3
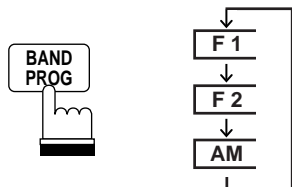
A.MEMO

TUNE
▶/II

Press and hold the A. MEMO button for at least **2** seconds.
The tuner will automatically seek and store 6 strong stations in the selected band in order of signal strength.
When the automatic storing has been completed, the tuner goes to the station stored in the preset location No. 1.

Note: If no stations are stored, the tuner will return to the original station you were listening to before the auto storing procedure began.

13

Radio Operation
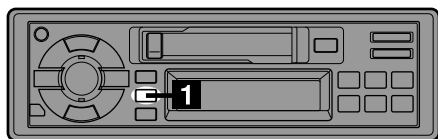
Storing into Direct Access Preset (D.A.P.) Band

Any combination of FM and AM stations (up to 6 stations total) can be manually preset into the D.A.P. band.
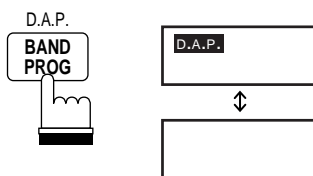
1 Press the D.A.P. button until the D.A.P. indicator appears.

Press the BAND button to select FM or AM. The selected band will be displayed.
To memorize stations onto the D.A.P. band, follow the steps for the Automatic or Manual Storing of Station Presets section above.

D.A.P.

BAND PROG

D.A.P.

↕

Note: This function can be used together with the Auto Memory function. In this case, either all FM or all AM stations will be stored into D.A.P.

To return to normal preset mode, press the D.A.P. button until the D.A.P. indicator disappears.

Radio Operation
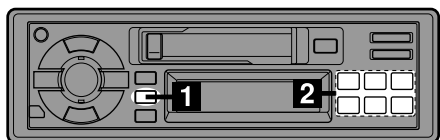
Tuning to Preset Stations

1

SOURCE → 90.1 ↓ TAPE

Press the SOURCE button until radio frequency appears in the display.

2

D.A.P.
BAND PROG → F 1 ↓ F 2 ↓ AM
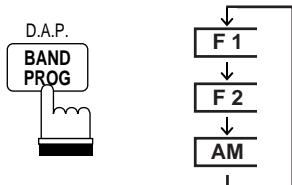
Press the BAND button repeatedly until the desired band is displayed.

D.A.P.
BAND PROG   D.A.P.
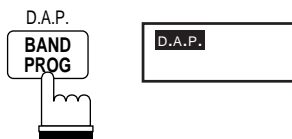
Press the D.A.P. button for at least 2 seconds to select the D.A.P. band.

3

| 1 B.SKIP | 2 P.S. DN | 3 P.S. UP |
| CT 4 | H 5 | M 6 |

F 1 1 90.1
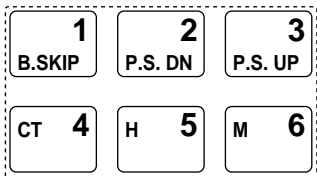
Press the preset button containing the desired radio station in memory. The Band, Preset number and station frequency will be displayed.

15
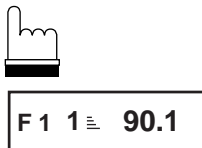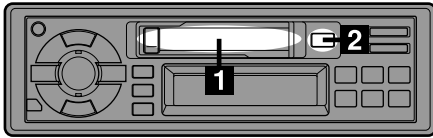
Inserting/Ejecting Cassette Tape

1
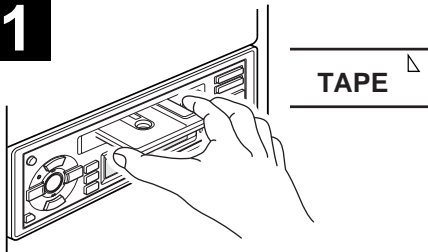
TAPE △

Insert a cassette tape into the slot with the open side facing to the right. The player automatically starts tape playback and the display shows "TAPE" and the tape side being played (△ or ▽).

When the end of the tape is reached, the player automatically reverses the tape direction and plays the other side of the tape.

2
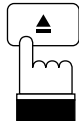
Press the Eject (▲) button when you want to eject the cassette tape.

Notes:
1. When power is turned off or the front panel is removed, the full-logic mechanism will automatically switch to the PAUSE mode.
2. Auto Metal
   When a metal cassette tape is inserted, the player automatically adjusts the equalization for metal or any other high bias tape for optimum sound.
   The display shows "MTL."

Normal Play

1
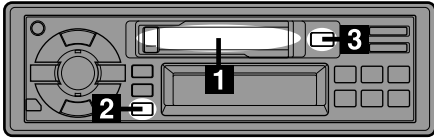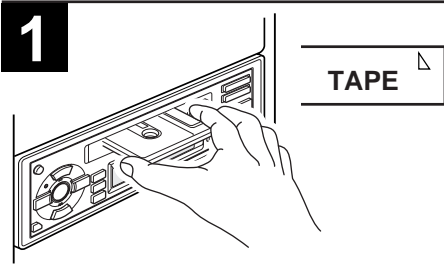
TAPE ◁

Insert cassette (if there is a cassette already in the player, press the source button) to switch from the tuner or CD Shuttle mode. The player begins playback. The display shows "TAPE" and " ◁ " or " ▽ " during tape playback to show the tape side being played. When the end of the tape is reached, the unit automatically stops and reverses the tape to play the other side of the tape.

2

A.MEMO
TUNE
▶/II

TAPE ◁

↓
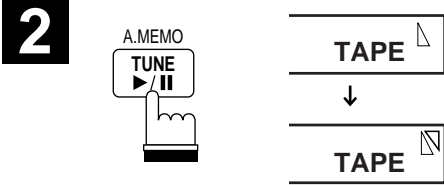
TAPE ▽

Press the ▶/II button to pause the tape playback.
Press again to resume the tape playback.

3

⏏
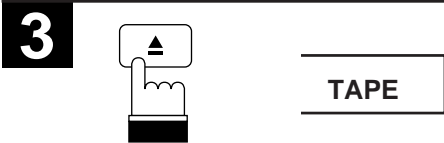
TAPE

Press the Eject (⏏) button to stop the tape play and eject the cassette. The tape-direction indicator disappears.

Repeat Play

1

REPEAT

REPEAT
TAPE ◁

↓
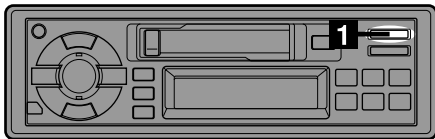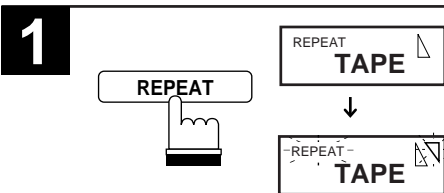
REPEAT
TAPE ▽

Press the REPEAT button and the REPEAT indicator appears in the display. The current program will be played back repeatedly.

Press the REPEAT button to stop the repeat play.
The REPEAT indicator disappears.

17
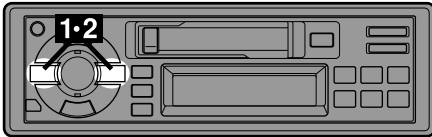
Fast Forward and Rewind

1

TAPE

I◄◄ DN   **UP ►►I**
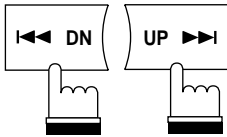
Press the DN or UP button during tape play to fast rewind or forward the tape respectively. The tape side indicator (△ or ▽) blinks. When the end of the tape is reached in the rewind mode, the player stops automatically and begins playing from the beginning of the same side. When the end of the tape is reached in the fast forward mode, the player stops automatically and begins playing from the beginning of the opposite side.

2

TAPE

I◄◄ DN   **UP ►►I**
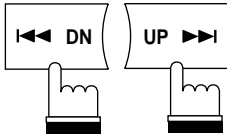
Press the UP button during forwarding to stop fast forwarding and resume tape play.
Press the DN button during rewinding to stop rewinding and resume tape play.
The tape side indicator stops blinking.

Blank Skip (B.SKIP)

1

1
B.SKIP
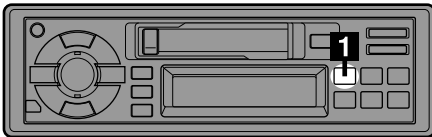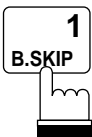
B.SKIP
TAPE

Press the B.SKIP button during tape play to skip over blank portions of the tape lasting 15 seconds or longer, "B.SKIP" appears on the display.

Press the B.SKIP button to cancel the blank skip mode. "B.SKIP" disappears from the display.

18

Manual Reverse

1

BAND
PROG

TAPE ◁

↕
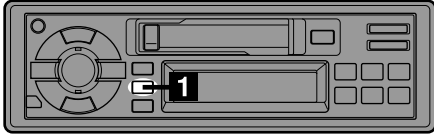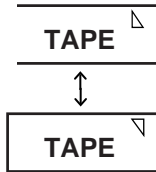
TAPE ◁

Press the PROG button during tape play to change the direction of play. The tape side indicators (◁ and ◁) change to show which side of the cassette is being played.
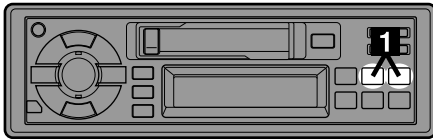
Program Sensor (P.S.)

1

2
P.S. DN

PS-1
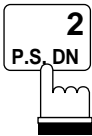
Press the P.S. DN button once to return to the beginning of the current selection being played. If you wish to return to a selection further back, press repeatedly until the number of selections you would like to skip is shown in the display. The display will show PS-1 with the first press and will increase by one with each successive press up to PS-9. The tape indictor will blink showing the direction of your search.

3
P.S. UP

PS+1

Press the P.S. UP button once to advance to the beginning of the next selection. If you wish to advance to a selection further ahead, press repeatedly until the number of selections you would like to skip is shown in the display. The display will show PS+1 with the first press and will increase with each successive press up to PS+9. The tape indicator will blink showing the direction of your search during searching operation.

Notes:
- The program sensor feature is functional in the tape play mode only.
- You can advance to the 9th (max.) program or retum to the 8th (max.) programme.
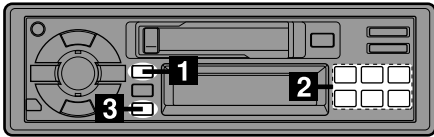
Controlling CD Shuttle (Optional)

If an optional Alpine 6-disc CD Shuttle is connected to the DIN connector of this unit, the CD shuttle can be controlled from the unit's front panel.

1
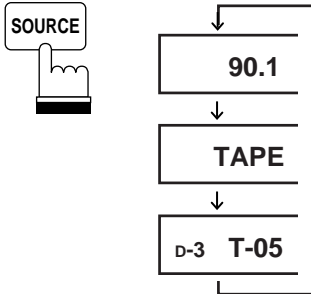
The display example shows when playing Track 5 on Disc 3.

SOURCE

90.1

↓

TAPE

↓

D-3   T-05

Press the SOURCE button to activate the CD Shuttle. The display shows the disc number and track number.

2

1 B.SKIP	2 P.S. DN	3 P.S. UP
CT 4	H 5	M 6
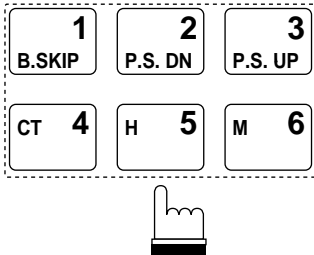
Press the Preset buttons to select the desired disc loaded in the CD Shuttle.

3

TUNE
▶/❚❚

D-2   PAU
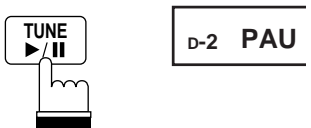
Press the ▶/❚❚ button to pause CD play. The display shows "PAU."
To resume CD play, press again. The PAU indicator disappears.

21

CD Shuttle Operation
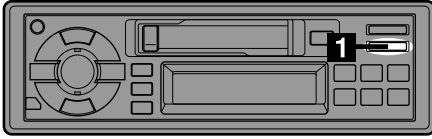
Switching Display

During CD playback, you can switch between the track number indication and elapsed time for the track being played.

1

D-3 **T-08**

↕

D-3 **0'16**

CLOCK
DISP
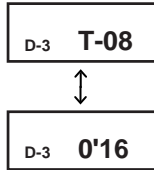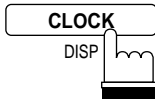
Press and hold the DISP (Display) button for at least 2 seconds to change the display.
Each press switches between the track number and elapsed time for the track being played.

22

CD Shuttle Operation
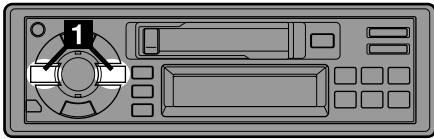
Music Sensor (M.S.) Skip

1

| I◀◀ DN | D-3 T-05 |
| ↓ |
| D-3 T-05 |
| ↓ |
| D-3 T-04 |
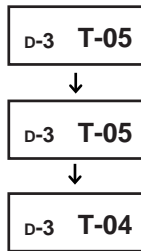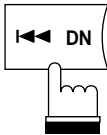
Momentarily press the I◀◀ DN button once to return to the beginning of the current track. The display example shows the current disc and track information (Disc 3, Track 5 currently playing). The next two display examples show what happens after one press or two presses of the I◀◀ DN button, respectively.
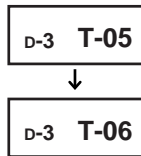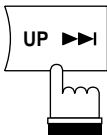
Press the UP ▶▶I button once to advance to the beginning of the next track. If you wish to

Note: The music sensor feature is functional in the play or pause mode.

| UP ▶▶I | D-3 T-05 |
| ↓ |
| D-3 T-06 |

advance to a track further ahead, press repeatedly until the desired track is reached.
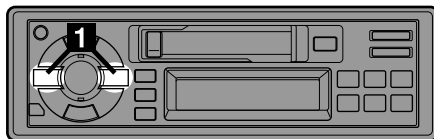
Fast Forward and Backward

1

| I◀◀ DN | UP ▶▶I |
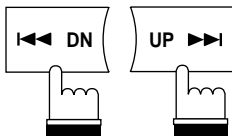
Press and hold the I◀◀ DN or UP ▶▶I button to quickly move backward or forward until you reach the desired section of the track. The display shows the elapsed time.

Note: This feature works only in the CD playback mode.

CD Shuttle Operation
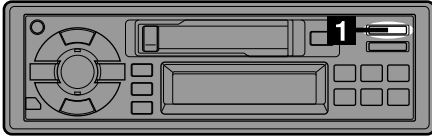
Repeat Play on Single Track or Entire

1

REPEAT
M.I.X.

↓

REPEAT

↓
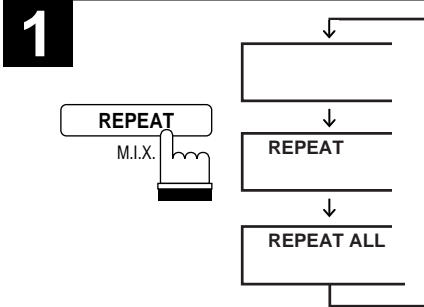
REPEAT ALL

Press the REPEAT button to display "REPEAT" or "REPEAT ALL" to play back repeatedly the current track being played or the entire disc selected.

Note: Single track cannot be repeated during M.I.X. play.

M.I.X. (Random) Play

1

REPEAT
M.I.X.

M.I.X.

↓
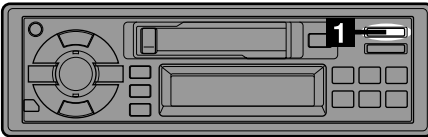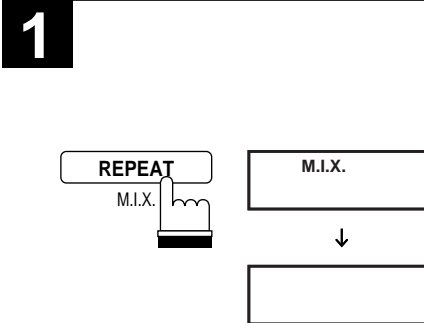
Press the M.I.X. button for at least 2 seconds while the CD is playing or in the Pause mode. The M.I.X. indicator will appear in the display. The tracks on the disc will be played back in a random sequence.
After all the tracks on the disc have been played back, the player loads the next disc and begins a new random sequence.

Random play continues until the M.I.X. mode is cancelled.

Press the M.I.X. button again for at least 2 seconds to cancel the M.I.X. mode. The M.I.X. indicator will disappear from the display.

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English
Clock Operation
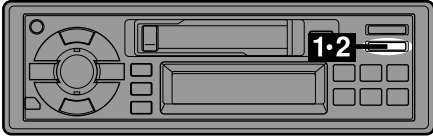
Displaying Time

1
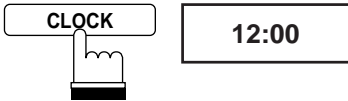
With the power turned on, press the CLOCK button to display the time. The unit displays the time.

| CLOCK | 12:00 |

Note: When in the Clock mode, operating the tuner, tape or CD will display their functions for **5** seconds. Display is then returned to show the time.

2
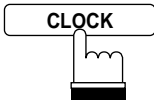
Press the CLOCK button to turn off the time and to show other functions.

CLOCK

25

Clock Operation

Setting Time

1

CLOCK

12:30
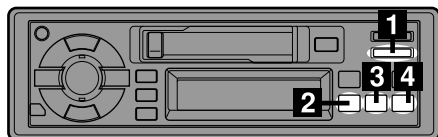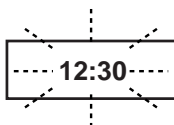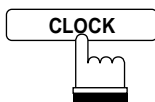
Press and hold the CLOCK button for at least 3 seconds. The time indication will blink for about 5 seconds.

2

CT 4

12:00
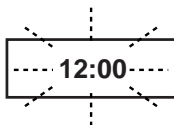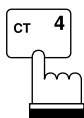
Press the CT button while the time indication is blinking to set minutes to "00".

3

H 5

9:00
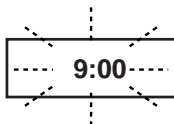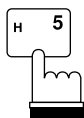
Example: To adjust to 9:35

Press the "H" button to adjust the hours while the time indication is blinking.

4

M 6

9:35

↓

9:35
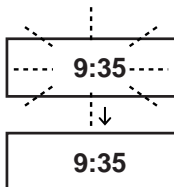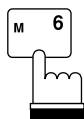
Press the "M" button to adjust the minutes while the time indication is blinking. The time is automatically set. The time indication will stop blinking, **5** seconds after adjusting the minutes.

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In Case of Difficulty

If you encounter a problem, please review the items in the following checklist. This guide will help you isolate the problem if the unit is at fault. Otherwise, make sure the rest of your system is properly connected or consult your authorized Alpine dealer.

Initial Turn-on After Installation

Symptom	Cause and Solution

No function or display.	• Car's ignition is off.
	  – If connected following instructions, the unit will not operate with the car's ignition off.
	
	• Improper power lead connections.
	  – Check power lead connections.
	
	• Blown fuse.
	  – Check the fuse on the battery leads; replace with the proper value if necessary.

In Case of Difficulty

Radio Mode

Symptom	Cause and Solution
Unable to receive stations.	• No antenna or open connection in cable. – Make sure the antenna is properly connected; replace the antenna or cable if necessary.

Unable to tune stations in the seek mode.	• You are in a weak signal area.
	  – Make sure the tuner is in the DX mode.
	• If the area you are in is a primary signal area, the antenna may not be grounded and connected properly.
	  – Check your antenna connections; make sure the antenna is properly grounded at its mounting location.
	• The antenna may not be the proper length.
	  – Make sure the antenna is fully extended; if broken, replace the antenna with a new one.

Broadcast is noisy.	• The antenna is not the proper length.
	  – Extend the antenna fully; replace it if it is broken.
	• The antenna is poorly grounded.
	  – Make sure the antenna is grounded properly at its mounting location.

Tape Mode

Output sounds dull.	• The tape head needs cleaning. – Clean the tape head.

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In Case of Difficulty

CD Shuttle Mode

Symptom	Cause and Solution
CD Shuttle not functioning.	• Out of operating temperature range +50˚C (+120˚F) for CD. – Allow the car's interior (or trunk) temperature to cool.
CD playback sound is wavering.	• Moisture condensation in the CD Module. – Allow enough time for the condensation to evaporate (about 1 hour).
Unable to fast forward or backward.	• The CD has been damaged. – Eject the CD and discard it; using a damaged CD in your unit can cause damage to the mechanism.
Sound skips due to vibration.	• Improper mounting of the CD Shuttle. – Securely re-mount the CD Shuttle. • Disc is very dirty. – Clean the disc. • Disc has scratches. – Change the disc.
Sound skips without vibration.	• Dirty or scratched disc. – Clean the disc; damaged discs should be replaced.
Single (8 cm) disc does not play.	• Single CD adaptor is not used. – Attach a single CD adaptor (recommended by Alpine) to the single disc and insert into the CD magazine.

In Case of Difficulty

Indication for CD Shuttle

Indication	Cause and Solution
- - - H	• Protective circuit is activated due to high temperature. – The indicator will disappear when the temperature returns to within operation range.

E-01	• Malfunction in the CD Shuttle.
	  – Consult your Alpine dealer.
	    Press the magazine eject button and pull out the magazine. Check the indication. Insert the magazine again. If the magazine cannot be pulled out, consult your Alpine dealer.
	
	• Magazine ejection not possible.
	  – Press the magazine eject button.
	    If the magazine does not eject, consult your Alpine dealer.

E-02	• A disc is left inside the CD Shuttle. – Press the EJECT button to activate the eject function. When the CD Shuttle finishes the eject function, insert an empty CD magazine into the CD Shuttle to receive the disc left inside the CD Shuttle.
EEEE	• Misconnection or disconnection of the CD Shuttle. – Check connections between the CD Shuttle and control unit.
- - - -	• No magazine is loaded into the CD Shuttle. – Insert a magazine.
T-00	• No indicated disc. – Choose another disc.

Specifications

FM TUNER SECTION

Tuning Range .... 87.5 – 108.0 MHz

Mono Usable Sensitivity .... 9.3 dBf (0.8 µV/75 ohms)

50 dB Quieting Sensitivity .... 13.5 dBf (1.3 µV/75 ohms)

Alternate Channel Selectivity .... 80 dB

Signal-to-Noise Ratio .... 65 dB

Stereo Separation .... 35 dB

Capture Ratio .... 2.0 dB

AM TUNER SECTION

Tuning Range .... 531 – 1,602 kHz

Usable Sensitivity .... 22.5 µV

Specifications

TAPE SECTION

Tape Speed .... 1-7/8 ips (4.8 cm/sec) ±0.7%

Wow & Flutter 0.06%

Tape Signal-to-Noise Ratio .... 60 dB

Frequency Response
   With Alpine Test Tape .... 30–20,000 Hz (±3 dB)

GENERAL

Power Requirement .... 14.4 V DC (11–16 V allowable)

Maximum Power Output* .... 35 W × 4

Continuous Power Output** .... 15 W × 4

Output Voltage .... 500 mV/10k ohms

Maximum Pre-Output Voltage .... 2 V/10k ohms

Bass .... ±15 dB/30 Hz

Treble .... ±10 dB/10 kHz

Weight .... 1.4 kg (3 lbs. 1 oz)

Loudness Contour .... 10 dB at 100 Hz

CHASSIS SIZE (W × H × D) .... 178 mm (7") × 50 mm (2") × 152 mm (6")

NOSEPIECE SIZE (W × H × D) .... 170 mm (6-3/4") × 46 mm (1-13/16") × 18 mm (11/16")

* Under maximum operating voltage and input
   signal, into 4 ohms.
** Per EIA-517 Standard, 40 Hz to 20 kHz,
   0.8% THD, at 14.4 V battery voltage.

Due to continuous product improvement,
specifications and design are subject to change
without notice.